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PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SHARP CORP

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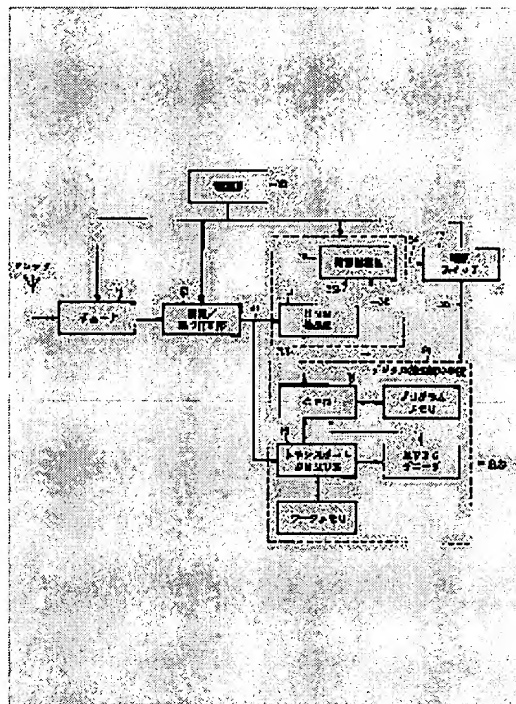
(72)Inventor : YARITA TAKESHI

(54) DIGITAL BROADCASTING RECEIVER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a digital broadcasting receiver provided with a means for reducing power consumption as much as possible in a reception operation at the time of standby in the digital broadcasting receiver.

SOLUTION: At the time of the standby, a tuner 11, a demodulation/error correction part 12 and an EMM detection part 13 are in an operation state. In the state, in the EMM detection part 13, when EMM data are detected from the packet ID of inputted transport signals 31, power source control signals 32 for controlling power source ON are outputted to a power source control part 16 and a power source switch 17 supplies power 35 to the block of a digital broadcasting decoding means 21. The EMM detection part 13 outputs the detection signals 33 of the EMM data to a CPU 14, and in the CPU 14, the processing operation of the EMM data are started, the processing is ended and end signals 36 are outputted to the power source control part 16. Thus, the power is not supplied to the block of the digital broadcasting decoding means 21 until the EMM data are detected again.



LEGAL STATUS

CLAIMS

[Claim(s)]

[Claim 1] A pretreatment means to be the digital-broadcasting receiving set which receives the broadcast signal transmitted with a digital gestalt according to a predetermined data format, and to restore to the received signal and to change into the transport signal of a digital gestalt, A digital-broadcasting decode means to consider this transport signal as an input and to perform the decode, signal generation processing, and limited reception for every channel classification / data classification, A reception management signal detection means to detect arrival of the reception management signal which includes information required for reception management of broadcast from said transport signal, The electric power switch which is turned on / cuts and carries out the power source to said digital-broadcasting decode means independently from said processing means and said reception management signal detection means, The digital-broadcasting receiving set characterized by providing the electric power switch control means which controls said electric power switch according to the detection result of said reception management signal detection means, enters / cuts, and carries out the power source to a digital-broadcasting decode means.

[Claim 2] It is the digital-broadcasting receiving set carry out said reception management signal-detection means detecting the completion of the reception management signal to said storage means of storage, inputting this detection result into said electric power switch control means, and performing the control action of the entering/the end while providing a storage means memorize said reception management signal temporarily, and a means supply the information on this storage means to said digital-broadcasting decode means, in a digital-broadcasting receiving set according to claim 1 as the description. [a power source]

[Claim 3] The digital-broadcasting receiving set characterized by inputting the detection result of the discernment ID by said reception management signal detection means into said electric power switch control means, and performing control action of entering/end of a power source while providing a means to detect the discernment ID which specifies a user as said reception management signal detection means in a digital-broadcasting receiving set according to claim 1 or 2.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the equipment concerned which was made to make small power consumption at the time of standby at the detail more about a digital-broadcasting receiving set.

[0002]

[Description of the Prior Art] In digital broadcasting, in order to make a contract of the

channel from which each user differs or to make a change of a channel agreement easy, an agreement is updated by the data (agreement update information: EMM) sent out using a broadcast wave. It is necessary to send out this EMM data to user each. Moreover, at what kind of time EMM data are received, and since it cannot specify, the same data are sent out repeatedly and it is necessary to continue receiving further also at the time of standby.

[0003] The configuration of the transmit format of EMM data is shown in drawing 7. As shown in drawing 7, EMM data are data of the packet format containing 188 bytes of data. It has the packet ID to show the class of packet in 1 byte of a head. Moreover, the user ID for identifying each user is contained in the data after this packet ID. Drawing 8 shows the configuration of an example of the conventional digital-broadcasting receiver as a block diagram. In the conventional receiver shown in drawing 8, in order to receive EMM data, it is necessary to continue feed from a power supply section in a tuner, and a recovery / error correction section also at the time of standby. Moreover, since distinction of EMM data and processing of the acquired data were performed inside the digital-broadcasting decode means (the broken-line section of drawing 8 shows) including Main CPU, supplying a power source also to a digital-broadcasting decode means including Main CPU had to be continued simultaneously, and the power consumption of the receiver at the time of standby was large.

[0004]

[Problem(s) to be Solved by the Invention] As described above, since a user's identification information contained in EMM data was distinguished in Main CPU, by the conventional approach, the power source always had to be supplied on Main CPU and the outskirts of it. for this reason, the time of reception of unnecessary data -- the system of a receiver -- all will maintain operating state mostly and power consumption will become large. This invention was made in view of the trouble in such a conventional technique, and makes it the technical problem which should be solved to offer the digital-broadcasting receiving set concerned which provided the means for it for the purpose of making power consumption small as much as possible in the reception actuation at the time of the standby in a digital-broadcasting receiving set.

[0005]

[Means for Solving the Problem] A pretreatment means for invention of claim 1 to be a digital-broadcasting receiving set which receives the broadcast signal transmitted with a digital gestalt according to a predetermined data format, and to restore to the received signal and to change into the transport signal of a digital gestalt, A digital-broadcasting decode means to consider this transport signal as an input and to perform the decode, signal generation processing, and limited reception for every channel classification / data classification, A reception management signal detection means to detect arrival of the reception management signal which includes information required for reception management of broadcast from said transport signal, The electric power switch which is turned on / cuts and carries out the power source to said digital-broadcasting decode means independently from said processing means and said reception management signal detection means, According to the detection result of said reception management signal detection means, control said electric power switch, and it is characterized by providing the electric power switch control means which enters / cuts and carries out the power source to a digital-broadcasting decode means, and sets for a reception management

signal detection means. Current supply is performed, when current supply is not carried out to a digital-broadcasting decode means but a desired signal is detected until a desired signal is detected. This is enabled to reduce the power consumption of a digital-broadcasting receiving set.

[0006] While invention of claim 2 possesses a storage means to memorize said reception management signal temporarily, and a means to supply the information on this storage means to said digital-broadcasting decode means, in a digital-broadcasting receiving set according to claim 1 Said reception management signal detection means detects the completion of storage of the reception management signal to said storage means. By it being characterized by inputting this detection result into said electric power switch control means, and performing control action of entering/end of a power source, and storing the acquired information temporarily It becomes possible from processing of data being attained even if it makes late timing of the current supply to digital-broadcasting decode processing to reduce power consumption more.

[0007] While invention of claim 3 possesses a means to detect the discernment ID which specifies a user as said reception management signal detection means in a digital-broadcasting receiving set according to claim 1 or 2 By it being characterized by inputting the detection result of the discernment ID by said reception management signal detection means into said electric power switch control means, and performing control action of entering/end of a power source, and detecting even Discernment ID with a reception management signal detection means It makes it possible to reduce the count of current supply to digital-broadcasting decode processing.

[0008]

[Embodiment of the Invention] The gestalt of operation of the digital-broadcasting receiving set by this invention is explained below using an attached drawing.

(Gestalt 1 of operation) Drawing 1 is the block diagram showing the configuration of 1 operation gestalt of the digital-broadcasting receiver by this invention. The broadcast data received from the antenna are changed into the transport signal 31 by a tuner 11, and the recovery / error correction section 12 in drawing 1 . This transport signal 31 is inputted into the transport DEMUX 15 included in the EMM detecting element 13 and the digital-broadcasting decode means 21. At the time of standby, a power source is supplied by the power supply section 18 [except the block of the digital-broadcasting decode means 21]. A DC power supply is not supplied to the circuit included in the block of the digital-broadcasting decode means 21 from a power supply section 18, but since it passes an electric power switch 17, it is supplied. An electric power switch 17 can control entering/end by the power control section 16.

[0009] Drawing 2 is the flow chart which shows the outline of actuation of the digital-broadcasting receiver shown in drawing 1 , and it explains the configuration and its actuation of this receiver below, referring to this flow chart. At the time of standby, a tuner 11, the recovery / error correction section 12, and the EMM detecting element 13 are in operating state. In this condition, the EMM detecting element 13 detects that it is EMM data from the packet ID of the inputted transport signal 31 (step S21). When EMM data are detected by the EMM detecting element 13, the power control signal 32 which controls entering a power source is outputted to the power control section 16 from the EMM detecting element 13 (step S22). With this power control signal 32, the power control section 16 outputs the power-source ON OFF signal 34 to an electric power

switch 17. The carrier beam electric power switch 17 supplies a power source 35 for the power-source ON OFF signal 34 to the block of the digital-broadcasting decode means 21.

[0010] Furthermore, the EMM detecting element 13 outputs the detecting signal 33 which tells that EMM data were detected to CPU14 (step S23). A power source 35 is supplied to the circuit included in the block of the digital-broadcasting decode means 21 by the electric power switch 17, and CPU14 starts processing actuation of EMM data by receiving a detecting signal 33 from the EMM detecting element 13 (step S24). After processing of EMM data is completed, CPU14 outputs a terminate signal 36 to the power control section 16 (step S25). The carrier beam power control section 16 outputs the power-source ON OFF signal 34 for this signal to an electric power switch 17, and an electric power switch 17 stops the current supply to the block of the digital-broadcasting decode means 21. A power source ceases to be supplied to the block of the digital-broadcasting decode means 21 until EMM data are detected again by this. Consequently, it is possible for a power source not to be supplied to the circuit included in the block of the digital-broadcasting decode means 21 until EMM data are detected, but to reduce the power consumption at the time of standby.

[0011] (Gestalt 2 of operation) Drawing 3 is the block diagram showing the configuration of other operation gestalten of the digital-broadcasting receiver by this invention. The digital-broadcasting receiver shown in drawing 3 adds the EMM data storage memory 19 to the digital-broadcasting receiver shown in the operation gestalt 1. Drawing 4 is the flow chart which shows the outline of processing actuation of the digital-broadcasting receiver shown in drawing 3, and it explains the configuration and its actuation of this receiver below, referring to this flow chart. When the EMM detecting element 13 detects EMM data, (step S41) and the EMM data which CPU14 was not operated and were acquired are once immediately stored in the EMM data storage memory 19 (step S42). EMM data -- all -- acquiring (step S43) -- by the EMM detecting element 13, the power control signal 32 is outputted to the power control section 16 (step S44). Thereby, a power source is supplied to the block of the digital-broadcasting decode means 21.

[0012] Then, the EMM detecting element 13 outputs a detecting signal 33 to CPU14 (step S45). By the detecting signal 33, CPU14 starts processing actuation of EMM data (step S46). CPU14 inputs EMM data from the EMM data storage memory 19, and performs required processing. When the processing to EMM data is completed, a terminate signal 36 is outputted to the operation gestalt 1 like the case of the digital-broadcasting receiver of a publication to the power control section 16 (step S47), and the current supply to the block of the digital-broadcasting decode means 21 is stopped. Consequently, from a digital-broadcasting receiver given in the gestalt 1 of operation, it becomes possible to delay current supply further, and the power consumption at the time of standby can be reduced.

[0013] (Gestalt 3 of operation) The digital-broadcasting receiver of this operation gestalt equips the EMM detecting element 13 of a digital-broadcasting receiver given in the operation gestalt 1 or the operation gestalt 2 with the user ID judging section 42 which specifies a user. Drawing 5 is the block diagram showing the operation gestalt of the EMM detecting element 13. Drawing 6 is the flow chart which shows the outline of processing actuation of the digital-broadcasting receiver containing the EMM detecting element shown in drawing 5, and it explains the configuration and its actuation of this

receiver below, referring to this flow chart. The EMM detecting element 13 consists of a packet ID detecting element 41 and the user ID judging section 42.

[0014] It judges whether the packet ID detecting element 41 is a packet in which the inputted transport signal 31 contains EMM data (step S61). When the inputted transport signal 31 is a packet containing EMM data, user ID is judged in the user ID judging section 42 (step S62). In the user ID judging section 42, if it judges that the acquired EMM data are data to the user of a receiver, the power control signal 32 will be outputted to the power control section 16 like before (step S65), an electric power switch 17 will be controlled, and a power source will be supplied to the block of the digital-broadcasting decode means 21. Moreover, the EMM detecting element 13 outputs a detecting signal 33 to CPU14 (step S66), and starts processing actuation of EMM data (step S67). When processing of EMM data is completed, a terminate signal 36 is outputted to the operation gestalt 1 or the operation gestalt 2 like the digital-broadcasting receiver of a publication to the power control section 16 (step S68), and the current supply to the block of the digital-broadcasting decode means 21 is stopped. In addition, the flow shown in the broken-line part of drawing 6 can be omitted, and explanation described above as what is depended on such an example was given. Although this broken-line part will be performed as steps S63 and S64 as it is the operation gestalt which uses the EMM data storage memory 19 and is shown in drawing 6 as a procedure, about that activity, it is the same as that of explanation of steps S42 and S43 in the flow of drawing 4, and suppose it that this is referred to.

[0015] In the digital-broadcasting receiver given in the operation gestalt 1 or the operation gestalt 2, user ID is identified by CPU14 and it was operating also to information other than the user of a receiver. With this operation gestalt, the block of the digital-broadcasting decode means 21 containing CPU14 should operate only to the data to the user of a receiver. Consequently, it becomes possible to reduce the power consumption at the time of standby further.

[0016]

[Effect of the Invention] According to the digital-broadcasting receiver according to claim 1, detection of required data can perform required processing, reducing the power consumption at the time of standby, since it processes in the small circuit (EMM detector) which only detects and the detection result of this circuit can perform current supply to the circuit which is the need and which must supply the power of a chisel many by the way. According to the digital-broadcasting receiver according to claim 2, as compared with invention of claim 1 which detects arrival of these data and supplies a power source immediately by storing receiving management data required for reception management of broadcast in a store, the current supply to a digital-broadcasting decode means can be delayed, and it becomes more reducible [power consumption]. Since it becomes unnecessary to operate a digital decode means from a desired signal to information other than the user of a receiver by performing the judgment of user-identification information further according to the digital-broadcasting receiver according to claim 3, it becomes still more nearly reducible [power consumption].

[Field of the Invention] This invention relates to the equipment concerned which was made to make small power consumption at the time of standby at the detail more about a digital-broadcasting receiving set.

PRIOR ART

[Description of the Prior Art] In digital broadcasting, in order to make a contract of the channel from which each user differs or to make a change of a channel agreement easy, an agreement is updated by the data (agreement update information: EMM) sent out using a broadcast wave. It is necessary to send out this EMM data to user each. Moreover, at what kind of time EMM data are received, and since it cannot specify, the same data are sent out repeatedly and it is necessary to continue receiving further also at the time of standby.

[0003] The configuration of the transmit format of EMM data is shown in drawing 7. As shown in drawing 7, EMM data are data of the packet format containing 188 bytes of data. It has the packet ID to show the class of packet in 1 byte of a head. Moreover, the user ID for identifying each user is contained in the data after this packet ID. Drawing 8 shows the configuration of an example of the conventional digital-broadcasting receiver as a block diagram. In the conventional receiver shown in drawing 8, in order to receive EMM data, it is necessary to continue feed from a power supply section in a tuner, and a recovery / error correction section also at the time of standby. Moreover, since distinction of EMM data and processing of the acquired data were performed inside the digital-broadcasting decode means (the broken-line section of drawing 8 shows) including Main CPU, supplying a power source also to a digital-broadcasting decode means including Main CPU had to be continued simultaneously, and the power consumption of the receiver at the time of standby was large.

EFFECT OF THE INVENTION

[Effect of the Invention] According to the digital-broadcasting receiver according to claim 1, detection of required data can perform required processing, reducing the power consumption at the time of standby, since it processes in the small circuit (EMM detector) which only detects and the detection result of this circuit can perform current supply to the circuit which is the need and which must supply the power of a chisel many by the way. According to the digital-broadcasting receiver according to claim 2, as compared with invention of claim 1 which detects arrival of these data and supplies a power source immediately by storing receiving management data required for reception management of broadcast in a store, the current supply to a digital-broadcasting decode means can be delayed, and it becomes more reducible [power consumption]. Since it becomes unnecessary to operate a digital decode means from a desired signal to information other than the user of a receiver by performing the judgment of user-identification information further according to the digital-broadcasting receiver according to claim 3, it becomes still more nearly reducible [power consumption].

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] As described above, since a user's identification information contained in EMM data was distinguished in Main CPU, by the conventional approach, the power source always had to be supplied on Main CPU and the outskirts of it. for this reason, the time of reception of unnecessary data -- the system of a receiver -- all will maintain operating state mostly and power consumption will become large. This invention was made in view of the trouble in such a conventional technique, and makes it the technical problem which should be solved to offer the digital-broadcasting receiving set concerned which provided the means for it for the purpose of making power consumption small as much as possible in the reception actuation at the time of the standby in a digital-broadcasting receiving set.

MEANS

[Means for Solving the Problem] A pretreatment means for invention of claim 1 to be a digital-broadcasting receiving set which receives the broadcast signal transmitted with a digital gestalt according to a predetermined data format, and to restore to the received signal and to change into the transport signal of a digital gestalt, A digital-broadcasting decode means to consider this transport signal as an input and to perform the decode, signal generation processing, and limited reception for every channel classification / data classification, A reception management signal detection means to detect arrival of the reception management signal which includes information required for reception management of broadcast from said transport signal, The electric power switch which is turned on / cuts and carries out the power source to said digital-broadcasting decode means independently from said processing means and said reception management signal detection means, According to the detection result of said reception management signal detection means, control said electric power switch, and it is characterized by providing the electric power switch control means which enters / cuts and carries out the power source to a digital-broadcasting decode means, and sets for a reception management signal detection means. Current supply is performed, when current supply is not carried out to a digital-broadcasting decode means but a desired signal is detected until a desired signal is detected. This is enabled to reduce the power consumption of a digital-broadcasting receiving set.

[0006] While invention of claim 2 possesses a storage means to memorize said reception management signal temporarily, and a means to supply the information on this storage means to said digital-broadcasting decode means, in a digital-broadcasting receiving set according to claim 1 Said reception management signal detection means detects the completion of storage of the reception management signal to said storage means. By it being characterized by inputting this detection result into said electric power switch control means, and performing control action of entering/end of a power source, and storing the acquired information temporarily It becomes possible from processing of data

being attained even if it makes late timing of the current supply to digital-broadcasting decode processing to reduce power consumption more.

[0007] While invention of claim 3 possesses a means to detect the discernment ID which specifies a user as said reception management signal detection means in a digital-broadcasting receiving set according to claim 1 or 2 By it being characterized by inputting the detection result of the discernment ID by said reception management signal detection means into said electric power switch control means, and performing control action of entering/end of a power source, and detecting even Discernment ID with a reception management signal detection means It makes it possible to reduce the count of current supply to digital-broadcasting decode processing.

[0008]

[Embodiment of the Invention] The gestalt of operation of the digital-broadcasting receiving set by this invention is explained below using an attached drawing.

(Gestalt 1 of operation) Drawing 1 is the block diagram showing the configuration of 1 operation gestalt of the digital-broadcasting receiver by this invention. The broadcast data received from the antenna are changed into the transport signal 31 by a tuner 11, and the recovery / error correction section 12 in drawing 1 . This transport signal 31 is inputted into the transport DEMUX 15 included in the EMM detecting element 13 and the digital-broadcasting decode means 21. At the time of standby, a power source is supplied by the power supply section 18 [except the block of the digital-broadcasting decode means 21]. A DC power supply is not supplied to the circuit included in the block of the digital-broadcasting decode means 21 from a power supply section 18, but since it passes an electric power switch 17, it is supplied. An electric power switch 17 can control entering/end by the power control section 16.

[0009] Drawing 2 is the flow chart which shows the outline of actuation of the digital-broadcasting receiver shown in drawing 1 , and it explains the configuration and its actuation of this receiver below, referring to this flow chart. At the time of standby, a tuner 11, the recovery / error correction section 12, and the EMM detecting element 13 are in operating state. In this condition, the EMM detecting element 13 detects that it is EMM data from the packet ID of the inputted transport signal 31 (step S21). When EMM data are detected by the EMM detecting element 13, the power control signal 32 which controls entering a power source is outputted to the power control section 16 from the EMM detecting element 13 (step S22). With this power control signal 32, the power control section 16 outputs the power-source ON OFF signal 34 to an electric power switch 17. The carrier beam electric power switch 17 supplies a power source 35 for the power-source ON OFF signal 34 to the block of the digital-broadcasting decode means 21.

[0010] Furthermore, the EMM detecting element 13 outputs the detecting signal 33 which tells that EMM data were detected to CPU14 (step S23). A power source 35 is supplied to the circuit included in the block of the digital-broadcasting decode means 21 by the electric power switch 17, and CPU14 starts processing actuation of EMM data by receiving a detecting signal 33 from the EMM detecting element 13 (step S24). After processing of EMM data is completed, CPU14 outputs a terminate signal 36 to the power control section 16 (step S25). The carrier beam power control section 16 outputs the power-source ON OFF signal 34 for this signal to an electric power switch 17, and an electric power switch 17 stops the current supply to the block of the digital-broadcasting

decode means 21. A power source ceases to be supplied to the block of the digital-broadcasting decode means 21 until EMM data are detected again by this. Consequently, it is possible for a power source not to be supplied to the circuit included in the block of the digital-broadcasting decode means 21 until EMM data are detected, but to reduce the power consumption at the time of standby.

[0011] (Gestalt 2 of operation) Drawing 3 is the block diagram showing the configuration of other operation gestalten of the digital-broadcasting receiver by this invention. The digital-broadcasting receiver shown in drawing 3 adds the EMM data storage memory 19 to the digital-broadcasting receiver shown in the operation gestalt 1. Drawing 4 is the flow chart which shows the outline of processing actuation of the digital-broadcasting receiver shown in drawing 3, and it explains the configuration and its actuation of this receiver below, referring to this flow chart. When the EMM detecting element 13 detects EMM data, (step S41) and the EMM data which CPU14 was not operated and were acquired are once immediately stored in the EMM data storage memory 19 (step S42). EMM data -- all -- acquiring (step S43) -- by the EMM detecting element 13, the power control signal 32 is outputted to the power control section 16 (step S44). Thereby, a power source is supplied to the block of the digital-broadcasting decode means 21.

[0012] Then, the EMM detecting element 13 outputs a detecting signal 33 to CPU14 (step S45). By the detecting signal 33, CPU14 starts processing actuation of EMM data (step S46). CPU14 inputs EMM data from the EMM data storage memory 19, and performs required processing. When the processing to EMM data is completed, a terminate signal 36 is outputted to the operation gestalt 1 like the case of the digital-broadcasting receiver of a publication to the power control section 16 (step S47), and the current supply to the block of the digital-broadcasting decode means 21 is stopped. Consequently, from a digital-broadcasting receiver given in the gestalt 1 of operation, it becomes possible to delay current supply further, and the power consumption at the time of standby can be reduced.

[0013] (Gestalt 3 of operation) The digital-broadcasting receiver of this operation gestalt equips the EMM detecting element 13 of a digital-broadcasting receiver given in the operation gestalt 1 or the operation gestalt 2 with the user ID judging section 42 which specifies a user. Drawing 5 is the block diagram showing the operation gestalt of the EMM detecting element 13. Drawing 6 is the flow chart which shows the outline of processing actuation of the digital-broadcasting receiver containing the EMM detecting element shown in drawing 5, and it explains the configuration and its actuation of this receiver below, referring to this flow chart. The EMM detecting element 13 consists of a packet ID detecting element 41 and the user ID judging section 42.

[0014] It judges whether the packet ID detecting element 41 is a packet in which the inputted transport signal 31 contains EMM data (step S61). When the inputted transport signal 31 is a packet containing EMM data, user ID is judged in the user ID judging section 42 (step S62). In the user ID judging section 42, if it judges that the acquired EMM data are data to the user of a receiver, the power control signal 32 will be outputted to the power control section 16 like before (step S65), an electric power switch 17 will be controlled, and a power source will be supplied to the block of the digital-broadcasting decode means 21. Moreover, the EMM detecting element 13 outputs a detecting signal 33 to CPU14 (step S66), and starts processing actuation of EMM data (step S67). When processing of EMM data is completed, a terminate signal 36 is outputted to the operation

gestalt 1 or the operation gestalt 2 like the digital-broadcasting receiver of a publication to the power control section 16 (step S68), and the current supply to the block of the digital-broadcasting decode means 21 is stopped. In addition, the flow shown in the broken-line part of drawing 6 can be omitted, and explanation described above as what is depended on such an example was given. Although this broken-line part will be performed as steps S63 and S64 as it is the operation gestalt which uses the EMM data storage memory 19 and is shown in drawing 6 as a procedure, about that activity, it is the same as that of explanation of steps S42 and S43 in the flow of drawing 4 , and suppose it that this is referred to.

[0015] In the digital-broadcasting receiver given in the operation gestalt 1 or the operation gestalt 2, user ID is identified by CPU14 and it was operating also to information other than the user of a receiver. With this operation gestalt, the block of the digital-broadcasting decode means 21 containing CPU14 should operate only to the data to the user of a receiver. Consequently, it becomes possible to reduce the power consumption at the time of standby further.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the block diagram showing the configuration of 1 operation gestalt of the digital-broadcasting receiver by this invention.

[Drawing 2] It is the flow chart which shows the outline of processing actuation with the digital-broadcasting receiver shown in drawing 1 .

[Drawing 3] It is the block diagram showing the configuration of other operation gestalten of the digital-broadcasting receiver by this invention.

[Drawing 4] It is the flow chart which shows the outline of processing actuation with the digital-broadcasting receiver shown in drawing 3 .

[Drawing 5] It is other operation gestalten of the digital-broadcasting receiver by this invention, and is the block diagram showing the configuration of an EMM detecting element.

[Drawing 6] It is the flow chart which shows the outline of processing actuation with the digital-broadcasting receiver which has the EMM detecting element shown in drawing 5 .

[Drawing 7] It is drawing showing the configuration of the transmit format (packet data) of EMM.

[Drawing 8] It is the block diagram of the configuration of an example of the conventional digital-broadcasting receiver.

[Description of Notations]

11 -- a tuner, 12 -- recovery / error correction section, a 13 --EMM detecting element, and 14 -- the CPU and 15 -- transport DEMUX, 16 -- power control section, and 17 -- an electric power switch, 18 -- power sources, 19 --EMM data storage memory, and 21 -- a digital-broadcasting decode means, 31 -- transport signal, 32 -- power control signal, and 33 -- a detecting signal, 34 -- power-sources ON OFF signal, 35 -- supply power source, and 36 -- a processing terminate signal a 41 -- packet ID detecting element, and 42 -- user ID judging section.

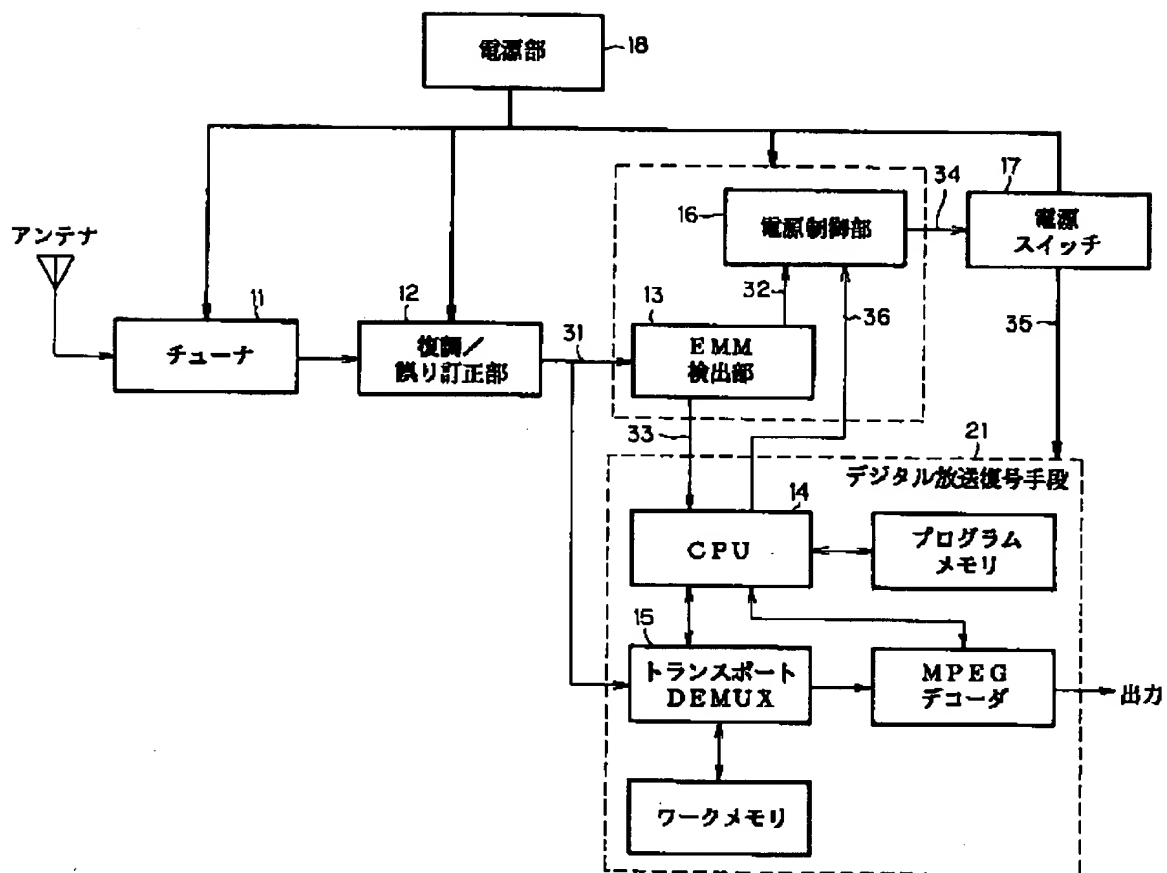


figure 1

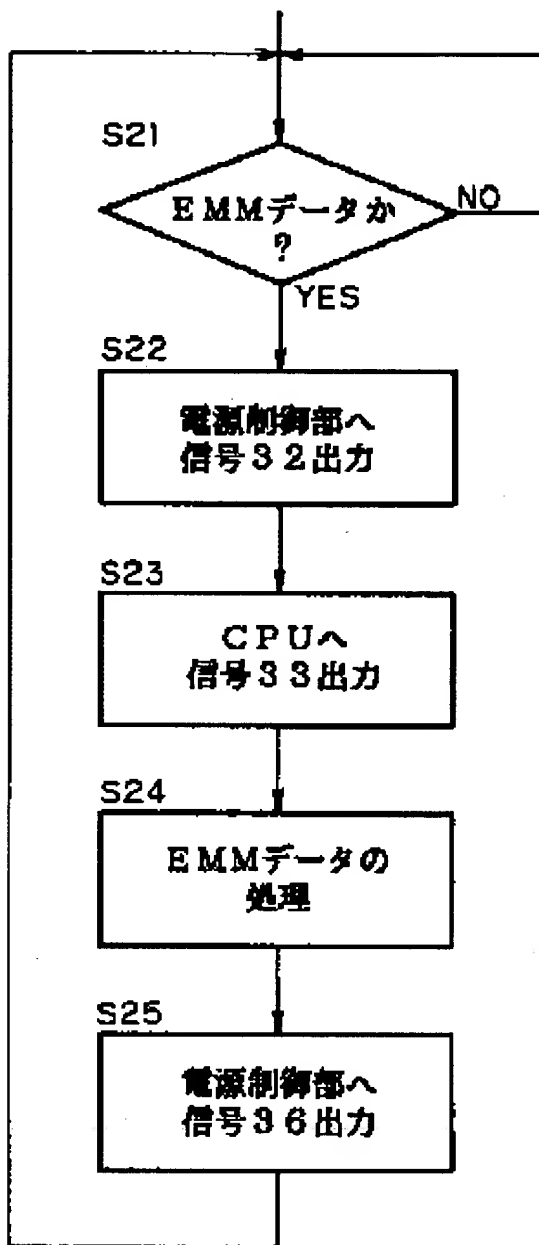


Figure 2

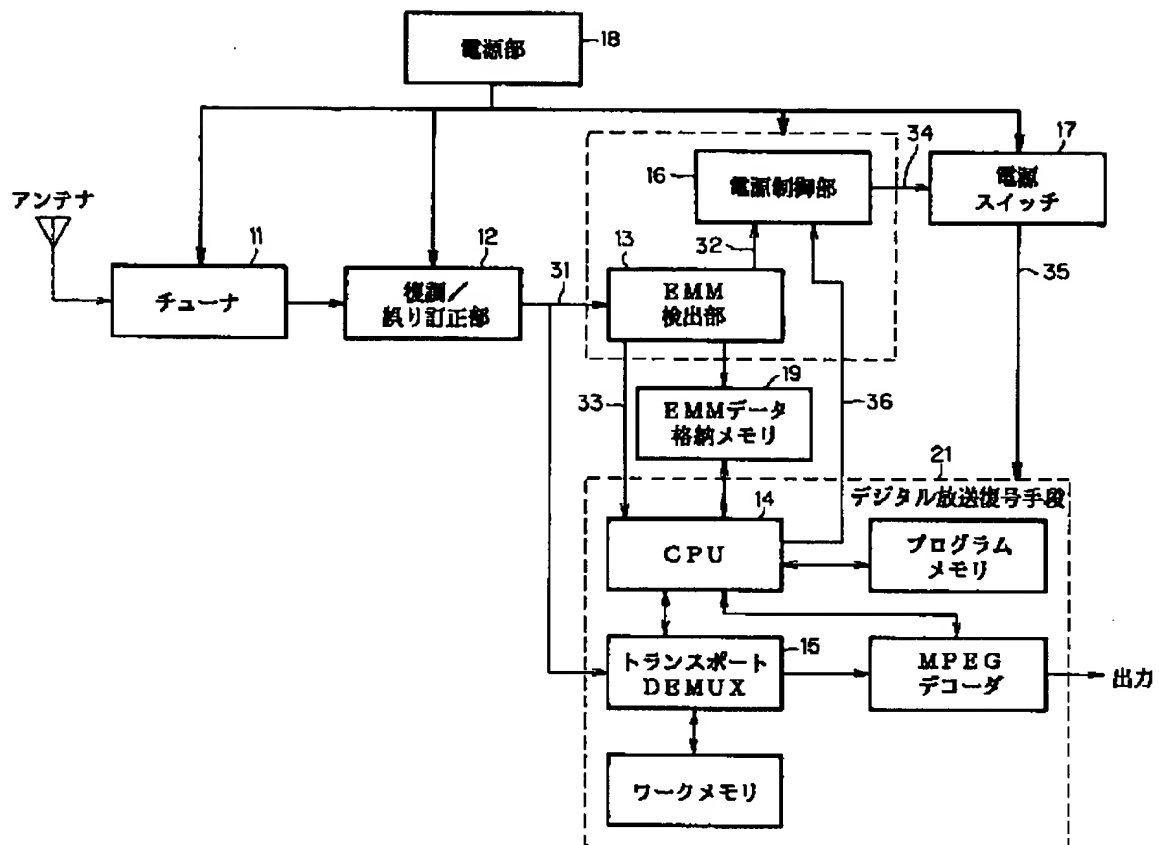


Figure 3

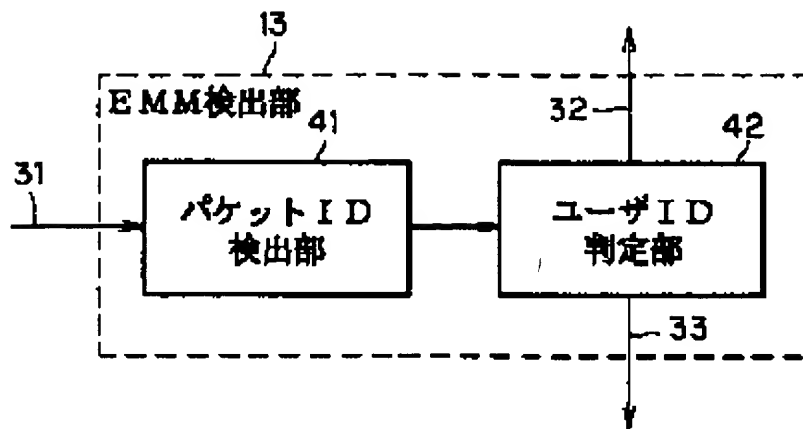


Figure 5

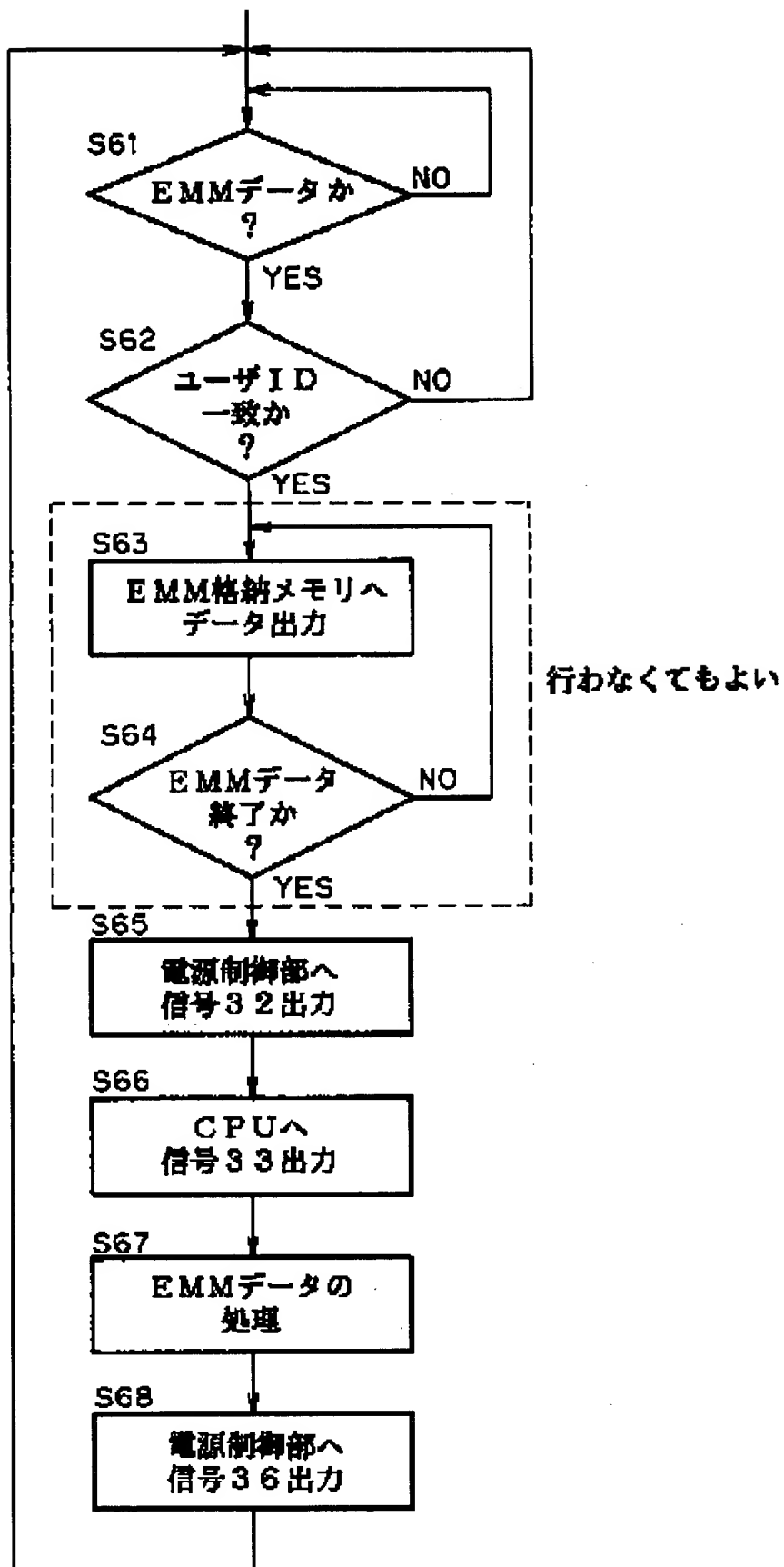


Figure 6

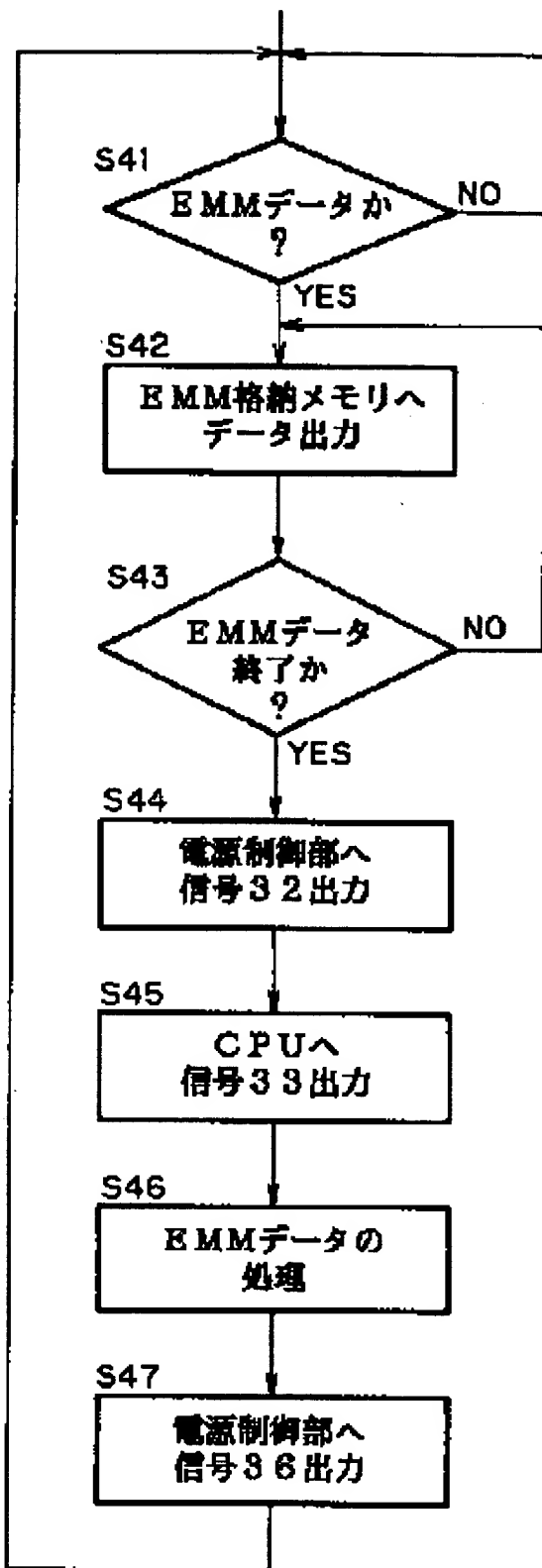


Figure 4

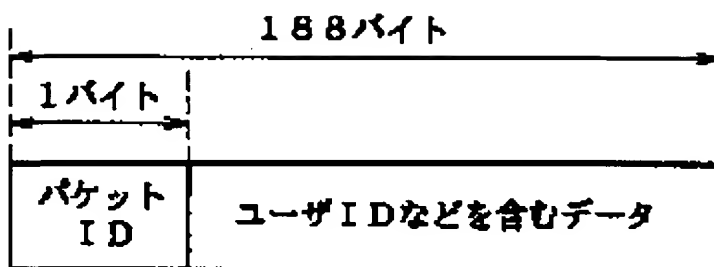


Figure 7

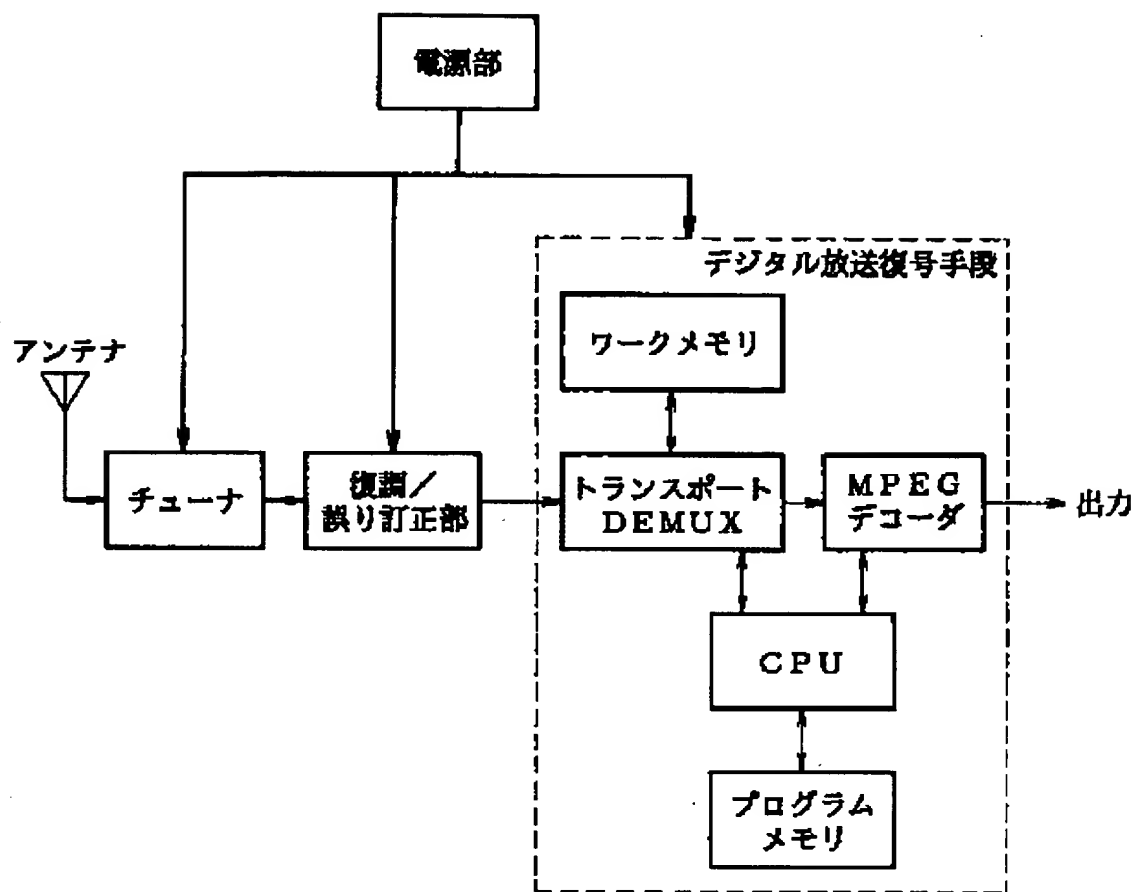


Figure 8